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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,945	02/20/2004	Norbertus Josephus Martinus Van Den Nieuwelaar	081468-0308367	9699

909 7590 08/09/2005

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EXAMINER

RUTLEDGE, DELLA J

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/781,945	VAN DEN NIEUWELAAR ET AL.	
	Examiner	Art Unit	
	D. Rutledge	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract has two paragraphs and “the abstract should be a brief narrative as a single paragraph of 150 words commencing on a separate sheet.” Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen, Jr. et al.

The reference discloses a predictive method in a semiconductor processing facility. The facility has a track apparatus (see col. 1, lines 5 – 29). As shown in Fig. 2, after a substrate lot is selected for processing the look ahead feature is executed and a simulation process is carried out to predict whether a second process /application will be ready for the substrate lot -

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The simulation would inherently comprise modeling and the modeling would use statistical and empirical data, as well as using the process recipe or schedule in order to make the prediction – claims 3 – 5, 11 – 13, 19 – 21, 26 - 28

The second process and the first process are not always literally the first and second process, rather the terms can become any process in the computer algorithm or recipe for making the semiconductor device and that would include the exposure apparatus.

When exposure is the “first process” the method can be used to determine when the exposure apparatus will be ready to deliver the substrate lot to the developer. When the exposure apparatus is the “second process” the method will predict if the exposure apparatus will be ready for the substrate lot. In predicting whether a process will be ready to receive the substrate lot a time period must be used – claims 6, 14, 22, 29

The methods of resolving the problem of the exposure apparatus or some other process not being to receive or deliver the substrate lot is to use the computer or controller to provide an intentional delay. Other units are notified of the delay. The delay may be provides by placing the substrates in a stocking unit – claims 1, 2, 7 - 10, 15 – 18, 23 – 25 and 30

4. Claims 1 – 30 are rejected under 35 U.S.C. 102 (e) as being anticipated by Fujita (US Pat. No. 6,698,944).

Fujita communicates expected times and predicted times of wafer delivery and receipt between the exposure apparatus 10 and a processing apparatus in the track apparatus of the lithocell 100. The reference teaches that if either apparatus will have a delay the

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apparatus can then decide the next operation in the exposure apparatus or in the processing apparatus based on the time information received; alternatively, either apparatus may decide to resolve the problem in relation to the substrate carriage – claims 1, 10, 18, 24. The substrate carriage may be prevented from delivering or receiving a substrate. By preventing the substrate carriage from sending or receiving a substrate an intentional delay is introduced – claims 2, 6 – 9, 15 – 17, 22, 23, 25, 29, 30. The decision can be made before the exposing or processing operation actually begins. The expected time is based on calculation and the predicted time is based on schedule and statistical data - claims 3 – 5, 11 – 13, 19 – 21, 26 – 28. See summary of the invention and col. 17, line 47 to col. 19, line 67.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference disclose methods of either introducing intentional delays or of resolving of delays such a using a priority method.

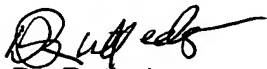
Response Data

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Rutledge whose telephone number is (571) 272-2127. The examiner can normally be reached on Mon - Thurs, 6:00 AM - 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


D. Rutledge
Primary Examiner
Art Unit 2851

dr
8/3/05